## **ABSTRACT**

A dialysis catheter comprising a catheter body having a proximal portion, a distal portion, a first longitudinally extending central lumen configured to deliver blood, and at least three longitudinally extending lumens positioned radially of the central lumen and configured to withdraw blood from a patient. At least one blood delivery opening is formed in the distal portion of the catheter body and in fluid communication with the first lumen and configured for passage of blood therethrough. At least three blood withdrawal openings are formed in the outer wall of the catheter body, wherein each of the openings is in fluid communication with one of the at least three lumens and is configured for passage of blood from a patient